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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/720,348

11/25/2003

Kunihito Takeuchi

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23373

7590

12/15/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

COHEN, AMY R

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,348

Applicant(s)

TAKEUCHI ET AL.

Examiner

Amy R. Cohen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/1/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Odagawa (U.S. Patent No. 5,349,530).

Odagawa teaches a direction indicating device (100) comprising: a directional section specifying unit (101) that detects geomagnetism to specify a directional section of a vehicle; a display directional section determining unit (104) that determines a current display directional section in consideration of historical information of the directional section of the vehicle specified by the directional section specifying unit and previous display directional section (Col 2, lines 35-58); and a directional section providing unit (102) that provides the current display directional section determined by the display directional section determining unit (Col 2, lines 35-58).

Odagawa teaches the direction indicating device wherein the directional section specifying unit repeatedly detects the geomagnetism and finds a mean value of the geomagnetism during a sampling period and specifies the directional section to which the mean value of the geomagnetism belongs, as the direction of the vehicle (Col 2, line 59-Col 3, line 22, Col 4, line 35-Col 5, line 23).

Odagawa teaches the direction indicating device wherein when the current directional section of the vehicle specified by the directional section specifying unit agrees with a previous directional section of the vehicle, the display directional section determining unit makes the

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current display directional section agree with the current directional section of the vehicle (Col 2, lines 35-58).

Odagawa teaches the direction indicating device wherein when the current directional section of the vehicle specified by the directional section specifying unit is different from the previous directional section of the vehicle, the display directional section determining unit makes the current display directional section agree with the previous display directional section (Col 2, line 35-Col 3, line 17, Col 5, lines 24-43).

Odagawa teaches the direction indicating device wherein when the current directional section of the vehicle is different from the previous directional section of the vehicle, the display directional section determining unit determines a traveling directional section of the vehicle from the current display directional section, the previous directional section of the vehicle, and the previous display directional section, and if the traveling directional section is constant, the display directional section determining unit updates the current display directional section to the traveling directional section side of the vehicle by one directional section from the previous display directional section (Col 2, line 35-Col 3, line 17, Col 5, lines 24-43).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odagawa in view of Masumoto et al. (U. S. Patent No. 5,349,529).

Odagawa discloses the direction indicating device as described above in paragraph 2.

Odagawa does not disclose the direction indicating device wherein when the current directional section of the vehicle specified by the directional section specifying unit agrees with the previous directional section of the vehicle, if the latest mean value of the geomagnetism is within a margin region provided to prevent chattering at a boundary of the display sections, the display directional section determining unit makes the current display directional section agree with the previous directional section, and if the latest mean value of the geomagnetism is without the margin region, the directional section determining unit makes the current display directional section agree with the current directional section of the vehicle.

Masumoto et al. discloses the direction indicating device wherein when the current directional section of the vehicle specified by the directional section specifying unit agrees with the previous directional section of the vehicle, if the latest mean value of geomagnetism is within a margin region provided to prevent chattering at a boundary of the directional sections, the display directional section determining unit makes the current display directional section agree with the previous display directional section, and if the latest mean value of geomagnetism is without the margin region, the display directional section determining unit makes the current display directional section agree with the current directional section of vehicle (Col 6, lines 18-48, Col 7, lines 15-29).

Masumoto et al. discloses the direction indicating device wherein when the current directional section of the vehicle specified by the directional section specifying unit, the previous directional section of the vehicle and the second previous directional section of the vehicle agree with each other, the display directional section determining unit narrows the margin region (Col 4, line 60-Col 5, line 37).

Masumoto et al. discloses the direction indicating device wherein when the current directional section of the vehicle specified by the directional section specifying unit is different from the previous directional section of the vehicle, the display directional section determining unit returns the margin region to its original size (Col 4, line 60-Col 5, line 37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the direction indicating device of Odagawa to include providing a margin region, as taught by Masumoto et al., in order to increase the accuracy of the direction indicating unit.

Response to Arguments

5. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R. Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARC
December 12, 2005



Diego Gutierrez
Supervisory Examiner
Tech Center 2800